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This opinion (1) was not written for publication and
(2) is not binding precedent of the Board.

Paper No. 32

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

In re WILLEM G. OPHEIJ
and JOZEF P.H. BENSCHOP

Appeal No. 95-2003
Application No. 08/074,265¹

ON BRIEF

Before THOMAS, FLEMING, and TORCZON, Administrative Patent
Judges.

TORCZON, Administrative Patent Judge.

BACKGROUND

This is an appeal under 35 U.S.C. § 134 from the final rejection of claims 23-26, 33, and 37. The examiner objects to claims 29-32 and 34-36 as depending from rejected claims. (Examiner's Answer at 8.) No other claims are pending. We reverse.

The subject matter of the invention is a device for optically reading information from or writing information onto a record carrier having a plurality of information tracks (e.g. a

¹ Attorney docket no. PHN 13,236B.

CD-ROM). Scanning spots, which are focused onto the surface of the information tracks, read and write information. Over the course of time, a scanning spot may become out of alignment with an associated track (tracking error) or the focal point of the scanning spot may become out of focus, which in turn distorts the shape of the scanning spot (focus error). Tilt of the record carrier with respect to the scanning device will defocus the scanning spots (tilt error).

The claimed invention has plural scanning spots, one scanning spot for each information track on the record carrier. A series of photodetectors associated with the plural scanning spots receive radiation from the information tracks via the scanning spots and convert the radiation into detection signals. The invention associates error detection circuits with the photodetectors, each of which derives from the detection signals either a focus error signal or a tracking error signal. A tilt control signal may be derived by combining at least two focus error signals. Independent claim 23 (emphasis added) illustrates the claimed subject matter:

23. A device for simultaneously optically scanning a plurality of the information tracks in an information plane of an optical record carrier, said device comprising:

a radiation source for supplying a series of scanning beams;

an objective system for focusing the scanning beams to form a corresponding series of scanning spots

focused on the information plane, each positioned on a respective information track to scan such track;

a series of photodetectors for respectively receiving radiation produced from the respective tracks by the scanning spots and converting such radiation into corresponding respective detection signals;

a plurality of error signal generating circuits respectively coupled to respective ones of said photodetectors for deriving respective error signals from the detection signals produced by the respective photodetectors, each error signal being either (i) a focus error signal indicative of focus error of the associated scanning spot with respect to the track being scanned thereby, or (ii) a tracking error signal indicative of tracking error of the associated scanning spot with respect to the track being scanned thereby; the respective error signals relating to respective ones of said tracks; and

signal combining means coupled to at least two of the error signal generating circuits for combining the error signals produced thereby so as to derive a control signal for control of at least one of (1) focus of each of the scanning beams, (2) tracking of each of the scanning beams, and (3) tilt of the record carrier relative to the scanning beams.

The examiner relied on the following references in rejecting the claims:

Russell	4,074,085	14 Feb. 1978
Rees et al. (Rees)	4,998,234	5 Mar. 1991
Hashimoto et al. (Hashimoto)	5,155,718	13 Oct. 1992
Inoue	JP 1-144235 ²	6 June 1989

Specifically, the examiner rejected claims 23 and 25 under 35 U.S.C. § 102(b) as anticipated by Russell. The examiner rejected remaining claims under 35 U.S.C. § 103 as obvious in

² We rely on a translation (attached) for our understanding of this reference.

view of combinations of Russell and the following references:

Inoue for claim 37, Hashimoto for claims 24 and 26, and Rees for claim 33. All pending claims ultimately depend from claim 23.

DISCUSSION

The examiner found that Russell's adders **116** (Figs. 2 & 4) teach claim 23's "signal combining means coupled to at least two of the error signal generating circuits for combining the error signals produced thereby so as to derive a control signal." We disagree. Russell's adders **116** combine detection signals, not error signals as claimed. The device of claim 23 processes detection signals to produce error signals and then combines the error signals. Thus, Russell does not teach "signal combining means coupled to at least two of the error signal generating circuits for combining the error signals produced thereby so as to derive a control signal."

Since the cited prior art does not teach or suggest a limitation in claim 23, we reverse the rejection of claim 23. Inoue, Hashimoto, and Rees do not teach or suggest the missing limitation so we reverse the rejection of claims 24-26, 33, and 37 as well.

DECISION

The examiner's rejections of claims 23-26, 33, and 37 are

REVERSED

JAMES D. THOMAS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
MICHAEL R. FLEMING)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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RICHARD TORCZON)	
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